

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A thin film formation apparatus for forming a thin film on a substrate, comprising:

a reaction chamber;

a gas introduction section for introducing a reactant gas into the reaction chamber;

an evacuation section for exhausting the reactant gas from the reaction chamber;

first and second planar electrodes provided in the reaction chamber;

first and second support members which respectively support the first and second electrodes in parallel relation;

a high frequency power source for applying high frequency power between the first and second electrodes; and

a heating section for heating one of the first and second electrodes;

wherein the substrate is placed on the heated electrode, and

wherein at least one of the first and second electrodes is supported movably in a lateral direction of thermal expansion by the corresponding support member, and wherein said corresponding support member has a protruding stop portion that does not engage said one electrode at room temperature thereby permitting said one electrode to expand laterally toward the stop portion at high temperatures so as to allow for thermal expansion of said one electrode.

2. (Original) A thin film formation apparatus as set forth in claim 1, wherein the at least one of the first and second electrodes is partly fixed to the corresponding support member.

3. (Original) A thin film formation apparatus as set forth in claim 1, wherein a portion of the at least one of the first and second electrodes is fixed to the corresponding support member, and the other portion of the at least one electrode is supported movably in the thermal expansion direction by the corresponding support member.

4. (Original) A thin film formation apparatus as set forth in claim 1, wherein the first and second electrodes are supported horizontally and perpendicularly to a gravity direction by the first and second support members.

5. (Currently amended) A thin film formation apparatus as set forth in claim 4, wherein the first and second support members each include a plurality of engagement or stop members which are spaced apart from the corresponding electrode at room temperature but which may engage the corresponding electrode after thermal expansion thereof loosely engaged with a periphery of the corresponding electrode, the engagement members each including an engagement piece spaced horizontally from the periphery of the electrode, and a support piece which supports a lower surface of the electrode.

6. (Original) A thin film formation apparatus as set forth in claim 4, wherein the first and second electrodes are generally rectangular, the first and second support members each including four engagement members which support four corners of the corresponding electrode.

7. (Original) A thin film formation apparatus as set forth in claim 1, wherein the first and second support members are each composed of an insulative material.

8. (Original) A thin film formation apparatus as set forth in claim 7, wherein the insulative material is one of glass, alumina and zirconia.

9. (Currently amended) A thin film formation apparatus for forming thin films on substrates respectively, comprising:

a reaction chamber;

a gas introduction section for introducing a reactant gas into the reaction chamber;

an evacuation section for exhausting the reactant gas from the reaction chamber;

plural pairs of first and second planar electrodes provided in the reaction chamber;

first and second support members which respectively support the first and second electrodes in each of the pairs in parallel relation;

a high frequency power source for applying high frequency power between the first and second electrodes in each of the pairs; and

a heating section for heating at least one of the first and second electrodes in each of the pairs;

wherein each substrate is placed on the heated electrode in each of the pairs, and wherein the heated electrode is supported by the first support member, said first support member comprising first and second protruding stop portions that do not engage the heated electrode at room temperature but can engage the first electrode at elevated temperatures thereby permitting

the heated electrode to expand laterally toward the stop portions when heated so as to allow for thermal expansion thereof and at least one of the first and second electrodes in each of the pairs is supported movably in a direction of thermal expansion by the corresponding support member.

10. (Original) A thin film formation apparatus as set forth in claim 9, wherein at least one of the first and second electrodes in each of the pairs is partly fixed to the corresponding support member.

11. (Original) A thin film formation apparatus as set forth in claim 9, wherein a portion of at least one of the first and second electrodes in each of the pairs is fixed to the corresponding support member, and the other portion of the at least one electrode is supported movably in the thermal expansion direction by the corresponding support member.

12. (Original) A thin film formation apparatus as set forth in claim 9, wherein the plural pairs of the first and second electrodes are supported horizontally and perpendicularly to a gravity direction by the first and second support members.

13. (Withdrawn) A thin film formation method which employs a thin film formation apparatus as set forth in claim 1 for forming a thin film on a substrate, the method comprising the steps of:

placing the substrate on the heated electrode;
supplying a reactant gas into the reaction chamber; and
applying high frequency power between the first and second electrodes.

14. (Withdrawn) A thin film formation method which employs a thin film formation apparatus as set forth in claim 9 for forming thin films on substrates respectively, the method comprising the steps of:

placing each substrate on the heated electrode in each of the pairs;
supplying a reactant gas into the reaction chamber;
applying high frequency power between the first and second electrodes in each of the pairs.